AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0002] with the following rewritten paragraph:

[0002] This invention relates generally to a system and associated method for detecting defects in a material and, more particularly, to a system and associated method for detecting defects in a material, where the system includes a transducer for coupling sound energy into the material in a manner that creates acoustic chaos in the material ~~or for coupling a multiple mode flexible excitation signal into the material~~, and includes a thermal imaging camera for imaging the heat created in the material as a result of the acoustic chaos or flexible excitation.

Please delete paragraph [0011].

Please replace Paragraph [0012] with the following rewritten paragraph:

[0012] In ~~another~~ one embodiment, a ~~coupling material, such as a non-linear coupling material, is positioned between the sound source and the structure to couple the sound signal into the structure. A~~ predetermined force is applied to the sound source to push it against the structure. The force and the pulse duration and frequency of the sound signal are selected so that the sound energy induces acoustic chaos in the structure, where the acoustic chaos increases the generation of thermal energy. The vibration of the structure can be measured by a vibrometer or microphone to determine if chaos frequencies are present.